

REMARKS

Claims 1 and 10-12 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,170,935 (*Federspiel et al.*).

As pointed out in response to the previous action,

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

This is not the case here.

Not only do independent claims 1 and 10 recite that *values of temperature measured at corresponding values of relative humidity are converted to values of perceived temperature* at a constant value of relative humidity as pointed out before, they also require "converting values of temperature measured at corresponding values of relative humidity to values of perceived temperature at a constant reference value of relative humidity." in claim 1 or a processing unit to do this in claim 10.

The Examiner implies that the comfort index (V) of *Federspiel* is equivalent to *Perceived Temperature* the claimed invention. The Applicant respectfully disagrees.

Federspiel explicitly describes the comfort index (V) as the heat transfer between the environment and the single state, lumped-parameter model of a clothed human (see column 6, lines 59-62 and Fig. 2). Furthermore, the comfort index (V) is proportional to the thermal

difference between the environmental conditions which produce thermal sensation and actual environmental conditions (see column 10, lines 52-60).

The comfort index (V) of *Federspiel* predicts a thermal sensation rating for an occupant (see column 16, lines 65-68). The claimed invention, on the other hand, attempts to match a reference input (i.e., a set-point) to the environmental conditions.

Moreover, Perceived Temperature in the claimed invention relates directly to a temperature scale rather than to an index such as the comfort index (V) of *Federspiel*. Specifically, the Perceived Temperature values in the claimed invention comprise modified or converted values of temperature. *Federspiel* does not disclose modifying or converting values of temperature.

Furthermore, *Federspiel* modifies the comfort index (V) under conditions of thermal equilibrium (see column 6, lines 52-58). However, the claimed invention does not define Perceived Temperature in terms of thermal equilibrium.

Furthermore, reference is made to the Examiner's comments at page 4, lines 9-11 and column 14, lines 3-13 of the Office Action in which it is alleged that *Federspiel* discloses *calculating values of perceived temperature ... based on a constant reference value of vapor pressure*.

However, the Applicant notes that assumption (3) at column 8, lines 1-2 of *Federspiel*, which states that vapor pressure of air expired by humans is constant, relates to an equation for determining evaporative heat loss from the human lungs. Thus, while *Federspiel* may assume

a constant vapor pressure of expired air in the equation for evaporative heat loss from the human lungs to derive the comfort index (V), *Federspiel* clearly does not use a constant value of relative humidity to directly modify measured values of temperature. The claimed invention, on the other hand, modifies temperature values based on a constant value of relative humidity. That is, each of a plurality of measured temperature values is modified based on a (single) constant value of relative humidity.

For at least the foregoing reasons, the method and system of the claimed invention is substantially different in functionality to that of *Federspiel*. Accordingly, it is submitted that claims 1 and 10-12 are not anticipated by *Federspiel* and meet the requirements of 45 USC 102.

Claims 1-3, 5-14, 16-19, 21, 32, 34, 38, and 40 stand rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent Re. 33,600 (*Timmons*) in view of U.S. Patent No. 5,170,935 (*Federspiel et al.*) and further in view of the NPL document (*Barnwell*).

A substitute declaration was filed on August 23, 2011 claiming priority from Australian Application 2004901054 and a certified copy thereof was submitted on the same date and receipt by the USPTO acknowledged on August 26. It is therefore submitted that the claims of the present application are entitled to a date of March 1, 2004.

The Applicant notes that the date of the *Barnwell* reference is “2004”. It is therefore not clear that *Barnwell* is a citable reference as prior art. The Applicant requests that the Examiner provide further publication details of the *Barnwell* reference to establish it as properly citable prior art or submits, in the alternative, that this rejection should be withdrawn.

Notwithstanding the foregoing, *Timmons* fails to disclose converting measured values of temperature (each of which is associated with a corresponding value of relative humidity) to values of Perceived Temperature at a constant reference value of relative humidity, as per the claimed invention. Rather, *Timmons* controls temperature and humidity separately (see column 15, lines 9-10, column 16, lines 3-13 and 41-51, column 17, lines 55-62, and column 18, lines 22-26). More specifically, *Timmons* uses a target temperature during the first 20 or 21 days (see column 10, lines 55-61) and a target humidity (see column 9, line 15 and column 11, lines 28-35).

Furthermore, *Timmons* discloses using humidity measurements averaged over a 24 hour period (see Fig. 1, Abstract, column 8, line 67 – column 9, line 2, column 9, lines 13-33, column 13, lines 14-28 and lines 48-68, and column 14, lines 15-22). This is substantially different to the claimed invention, in which the converted values of Perceived Temperature relate to a common constant reference value of relative humidity as opposed to an average value.

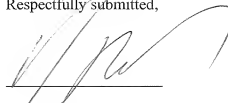
As discussed above in relation to the 35 U.S.C. 102(b) rejection, *Federspiel* fails to remedy the shortcomings of *Timmons*. If the controller of *Timmons* were modified in view of the

teachings of Federspiel, the skilled reader would develop a comfort index (V) for chickens. This would result in control based on a comfort index rather than control based on temperature values, which is substantially different to the claimed invention.

For at least the foregoing reasons, the Applicant submits that the Office Action fails to establish that the claimed invention would have been obvious to a person of ordinary skill in the art in view of a combination of the cited references at the time that the invention was made. Accordingly, the claimed invention is patentable over a combination of the cited references.

In view of the foregoing, it is submitted that this application is in order for allowance and an early action to this end is respectfully solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'J. Richards', is written over a horizontal line.

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